

Power Cost Memorandum Fuel Cost Update

Date: April 20, 2023

Utility Name (254) North Slope Borough Power and Light	Utility File No. PC38-1215P	Date Filed : April 5, 2023
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PCE AMOUNT SUMMARY	Previously Approved PC38-1215O	Staff Recommended Amount(s) and Effective Date PC38-1215P
Class Rate	Date Approved: August 19, 2022	April 21, 2023
See Attachment 1	See Attachment 1	See Attachment 1
<input type="checkbox"/> Interim <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Interim <input checked="" type="checkbox"/> Permanent		

Staff recommends North Slope Borough Power and Light's (NSPL) PCE annual report due date change from December 31 each year to April 30 each year, beginning April 30, 2024. NSPL generally requests an extension in filing its annual report due to waiting for its audited financial statements.

Signed: *Brenda Cox* Utility Financial Analyst
Brenda Cox

Commission decision re. this recommendation :

	Date (if different from 4/20/23)	I CONCUR	I DO NOT CONCUR	I WILL WRITE A DISSENTING STATEMENT *
Kurber		<i>KRT</i>		
Doyle		<i>BD</i>		
Pickett		<i>RME</i>		
Sullivan		<i>RME</i> For DS		
Wilson	4/21/23	<i>JWW</i>		

Special Instructions to Staff:

* If this column is initialed, Staff will contact the Commissioner for the statement, otherwise, dissent will simply be noted at the close of the By Direction Letter or Order.

NORTH SLOPE BOROUGH POWER AND LIGHT

PCE Amount Summary

Village	Staff Recommended Costs			Staff Recommended PCE				
	PC38-1215P			PC38-1215P				
	Non Fuel Cost	Fuel Cost	Total Cost	Residential	Residential	Community	Community	Community
	Per Staff	Per Staff	Per Staff	0-600	601+	0-1,000	1,001-10,000	10,000-above
	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)
Anaktuvuk Pass	0.3699	0.7403	1.1103	0.0000	0.1542	0.0042	0.1042	0.1542
Point Hope	0.3699	0.5299	0.8998	0.0000	0.1542	0.0042	0.1042	0.1542
Nuiqsut	0.3699	0.2075	0.5774	0.0000	0.0000	0.0042	0.1042	0.0000
Point Lay	0.3699	0.5692	0.9391	0.0000	0.1542	0.0042	0.1042	0.1542
Wainwright	0.3699	0.6180	0.9879	0.0000	0.1542	0.0042	0.1042	0.1542
Kaktovik	0.3699	0.3613	0.7313	0.0000	0.1542	0.0042	0.1042	0.1542
Atqasuk	0.3699	1.2662	1.6361	0.0000	0.1542	0.0042	0.1042	0.1542
Village	Prior Approved Costs			Prior Approved PCE				
	PC38-1215O			PC38-1215O				
	Non Fuel Cost	Fuel Cost	Total Cost	Residential	Residential	Community	Community	Community
	Per Staff	Per Staff	Per Staff	0-600	601+	0-1,000	1,001-10,000	10,000-above
	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)	(KWH)
Anaktuvuk Pass	0.3699	0.6963	1.0663	0.0000	0.1542	0.0042	0.1042	0.1542
Point Hope	0.3699	0.4509	0.8208	0.0000	0.1542	0.0042	0.1042	0.1542
Nuiqsut	0.3699	0.1099	0.4799	0.0000	0.0000	0.0042	0.1042	0.0000
Point Lay	0.3699	0.4212	0.7911	0.0000	0.1542	0.0042	0.1042	0.1542
Wainwright	0.3699	0.4586	0.8286	0.0000	0.1542	0.0042	0.1042	0.1542
Kaktovik	0.3699	0.2777	0.6476	0.0000	0.1542	0.0042	0.1042	0.1542
Atqasuk	0.3699	0.4998	0.8697	0.0000	0.1542	0.0042	0.1042	0.1542

North Slope Borough Power and Light

Power Cost Equalization Calculation

Based on the Test Period Ending June 20, 2015

Fuel Cost Update

Rate Schedule:

Residential 0-600 kWh

Current Funding Level: 100.0% Base: 0.1958

Max: 0.7640

Non-Fuel Cost (NFC): 0.3699

Village	Residential 0-600 kWh					
	Fuel Cost (KWH)	PCE Costs (\$KWH)	Cost Based PCE (\$KWH)	Rate (\$KWH)	Avg. Class Rate (\$KWH)	ACTUAL PCE (\$KWH)
Anaktuvuk Pass	0.7403	1.1103	0.7640	0.1500	0.0000	0.0000
Point Hope	0.5299	0.8998	0.6688	0.1500	0.0000	0.0000
Nuiqsut	0.2075	0.5774	0.3626	0.0800	0.0000	0.0000
Point Lay	0.5692	0.9391	0.7061	0.1500	0.0000	0.0000
Wainwright	0.6180	0.9879	0.7525	0.1500	0.0000	0.0000
Kaktovik	0.3613	0.7313	0.5087	0.1500	0.0000	0.0000
Atqasuk	1.2662	1.6361	0.7640	0.1500	0.0000	0.0000

PCE Costs = NFC+Fuel

Cost Based PCE= 95% of (PCE Costs - Base)

Average Class Rate = Rate- Base

Max = 95% of Maximum allowed PCE Costs (76.40 cents/kWh)

Actual PCE = Lesser of: Cost Based, Rate Based or Max, at Current Funding Level

PCE for AKP is Based on:

Rates

PCE for PHO is Based on:

Rates

PCE for NQT is Based on:

Rates

PCE for PLY is Based on:

Rates

PCE for AIN is Based on:

Rates

PCE for KAK is Based on:

Rates

PCE for ATQ is Based on:

Rates

North Slope Borough Power and Light

Power Cost Equalization Calculation

Based on the Test Period Ending June 20, 2015

Fuel Cost Update

Rate Schedule:

Residential 601+ kWh

Current Funding Level: 100.0% Base: 0.1958

Max: 0.7640

Non-Fuel Cost (NFC): 0.3699

Village				Residential 601+ kWh		
	Fuel Cost (KWH)	PCE Costs (\$KWH)	Cost Based PCE (\$KWH)	Rate (\$KWH)	Avg. Class Rate (\$KWH)	ACTUAL PCE (\$KWH)
Anaktuvuk Pass	0.7403	1.1103	0.7640	0.3500	0.1542	0.1542
Point Hope	0.5299	0.8998	0.6688	0.3500	0.1542	0.1542
Nuiqsut	0.2075	0.5774	0.3626	0.0800	0.0000	0.0000
Point Lay	0.5692	0.9391	0.7061	0.3500	0.1542	0.1542
Wainwright	0.6180	0.9879	0.7525	0.3500	0.1542	0.1542
Kaktovik	0.3613	0.7313	0.5087	0.3500	0.1542	0.1542
Atqasuk	1.2662	1.6361	0.7640	0.3500	0.1542	0.1542

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Rates

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Rates

PCE for PLY is Based on:

Rates

PCE for AIN is Based on:

Rates

PCE for KAK is Based on:

Rates

PCE for ATQ is Based on:

Rates

North Slope Borough Power and Light

Power Cost Equalization Calculation

Based on the Test Period Ending June 20, 2015

Fuel Cost Update

Rate Schedule:

Community 0-1,000 kWh

Current Funding Level: 100.0% Base: 0.1958

Max: 0.7640

Non-Fuel Cost (NFC): 0.3699

Village	Community 0-1,000 kWh					
	Fuel Cost (\$KWH)	PCE Costs (\$KWH)	Cost Based PCE (\$KWH)	Rate (\$KWH)	Avg. Class Rate (\$KWH)	ACTUAL PCE (\$KWH)
Anaktuvuk Pass	0.7403	1.1103	0.7640	0.2000	0.0042	0.0042
Point Hope	0.5299	0.8998	0.6688	0.2000	0.0042	0.0042
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Wainwright	0.6180	0.9879	0.7525	0.2000	0.0042	0.0042
Kaktovik	0.3613	0.7313	0.5087	0.2000	0.0042	0.0042
Atkasuk	1.2662	1.6361	0.7640	0.2000	0.0042	0.0042

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Rates

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Rates

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Rates

PCE for KAK is Based on:

Rates

PCE for ATQ is Based on:

Rates

North Slope Borough Power and Light

Power Cost Equalization Calculation

Based on the Test Period Ending June 20, 2015

Fuel Cost Update

Rate Schedule:

Community 1,001-10,000 kWh

Current Funding Level: 100.0% Base: 0.1958

Max: 0.7640

Non-Fuel Cost (NFC): 0.3699

Village	Community 1,001-10,000 kWh					
	Fuel Cost (KWH)	PCE Costs (\$KWH)	Cost Based PCE (\$KWH)	Rate (\$KWH)	Avg. Class Rate (\$KWH)	ACTUAL PCE (\$KWH)
Anaktuvuk Pass	0.7403	1.1103	0.7640	0.3000	0.1042	0.1042
Point Hope	0.5299	0.8998	0.6688	0.3000	0.1042	0.1042
Nuiqsut	0.2075	0.5774	0.3626	0.3000	0.1042	0.1042
Point Lay	0.5692	0.9391	0.7061	0.3000	0.1042	0.1042
Wainwright	0.6180	0.9879	0.7525	0.3000	0.1042	0.1042
Kaktovik	0.3613	0.7313	0.5087	0.3000	0.1042	0.1042
Atqasuk	1.2662	1.6361	0.7640	0.3000	0.1042	0.1042

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PCE for NQT is Based on:

Rates

PCE for PLY is Based on:

Rates

PCE for AIN is Based on:

Rates

PCE for KAK is Based on:

Rates

PCE for ATQ is Based on:

Rates

North Slope Borough Power and Light

Power Cost Equalization Calculation

Based on the Test Period Ending June 20, 2015

Fuel Cost Update

Rate Schedule:

Community 10,001-above kWh

Current Funding Level: 100.0% Base: 0.1958

Max: 0.7640

Non-Fuel Cost (NFC): 0.3699

Village				Community 10,001-above kWh		
	Fuel Cost (\$KWH)	PCE Costs (\$KWH)	Cost Based PCE (\$KWH)	Rate (\$KWH)	Avg. Class Rate (\$KWH)	ACTUAL PCE (\$KWH)
Anaktuvuk Pass	0.7403	1.1103	0.7640	0.3500	0.1542	0.1542
Point Hope	0.5299	0.8998	0.6688	0.3500	0.1542	0.1542
Nuiqsut	0.2075	0.5774	0.3626	0.0800	0.0000	0.0000
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Kaktovik	0.3613	0.7313	0.5087	0.3500	0.1542	0.1542
Atqasuk	1.2662	1.6361	0.7640	0.3500	0.1542	0.1542

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Cost Based PCE= 95% of (PCE Costs - Base)

Average Class Rate = Rate- Base

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Rates

PCE for NQT is Based on:

Rates

PCE for PLY is Based on:

Rates

PCE for AIN is Based on:

Rates

PCE for KAK is Based on:

Rates

PCE for ATQ is Based on:

Rates

NORTH SLOPE BOROUGH POWER AND LIGHT

SCHEDULE OF ELIGIBLE NON-FUEL COSTS, AND SALES

FOR TEST YEAR ENDING JUNE 30, 2015

Fuel Cost Update

Non-Fuel Costs:	Prior Approved PC38-1215N	Per Utility PC38-1215O	Per Staff PC38-1215O
A. Personnel Costs	6,354,991	6,354,991	6,354,991
B. Power Plant Parts/ Supplies	273,038	273,038	273,038
C. Repairs and Maintenance	413,977	413,977	413,977
D. General & Administrative	4,965,888	4,965,888	4,965,888
E. Depreciation	-	-	-
F. Interest Expense	-	-	-
G. Other	-	-	-
H. Total Non-Fuel Costs	12,007,894	12,007,894	12,007,894
I. Total kWh Sold	32,459,626	32,459,626	32,459,626
J. Total kWh Generated	37,020,674	37,020,674	37,020,674
K. Non-Fuel Cost/kWh (H / I)	0.3699	0.3699	0.3699

NORTH SLOPE BOROUGH POWER AND LIGHT
SCHEDULE OF ELIGIBLE FUEL COSTS, EFFICIENCY, AND LINE LOSS INFORMATION
FOR THE TEST PERIOD ENDING JUNE 30, 2015

	Village	Prior Approved PC38-1215O	Per Utility PC38-1215P	Per Staff PC38-1215P
A Fuel Consumed (Gallons)	Anaktuvuk Pass	518,902	430,910	430,910
	Point Hope	785,001	881,751	881,751
	Nuiqsut	185,776	209,253	209,253
	Point Lay	440,000	565,000	565,000
	Wainwright	875,000	1,130,397	1,130,397
	Kaktovik	445,000	544,900	544,900
	Atqasuk	499,950	845,110	845,110
B Fuel Cost Per Gallon (Dollars)	Anaktuvuk Pass	\$ 4.9452	\$ 6.3315	\$ 6.3315
	Point Hope	\$ 3.1721	\$ 3.3186	\$ 3.3186
	Nuiqsut	\$ 3.3211	\$ 5.5655	\$ 5.5655
	Point Lay	\$ 3.1960	\$ 3.3634	\$ 3.3634
	Wainwright	\$ 3.1626	\$ 3.2987	\$ 3.2987
	Kaktovik	\$ 3.1754	\$ 3.3746	\$ 3.3746
	Atqasuk	\$ 3.1767	\$ 4.7609	\$ 4.7609
C Cost of Fuel Consumed (Fuel * Cost / Gallon)	Anaktuvuk Pass	2,566,074	2,728,307	2,728,307
	Point Hope	2,490,102	2,926,179	2,926,179
	Nuiqsut	616,981	1,164,598	1,164,598
	Point Lay	1,406,240	1,900,321	1,900,321
	Wainwright	2,767,275	3,728,841	3,728,841
	Kaktovik	1,413,053	1,838,820	1,838,820
	Atqasuk	1,588,191	4,023,484	4,023,484
D kWh Generated	Anaktuvuk Pass	3,862,400	3,862,400	3,862,400
	Point Hope	6,337,590	6,337,590	6,337,590
	Nuiqsut (diesel)	189,606	189,606	189,606
	Nuiqsut Total	6,819,922	6,819,922	6,819,922
	Point Lay	3,570,319	3,570,319	3,570,319
	Wainwright	7,019,780	7,019,780	7,019,780
	Kaktovik	5,782,817	5,782,817	5,782,817
E kWh Sales	Atqasuk	3,438,240	3,438,240	3,438,240
	Anaktuvuk Pass	3,685,167	3,685,167	3,685,167
	Point Hope	5,522,605	5,522,605	5,522,605
	Nuiqsut	5,612,507	5,612,507	5,612,507
	Point Lay	3,338,839	3,338,839	3,338,839
	Wainwright	6,033,753	6,033,753	6,033,753
	Kaktovik	5,089,168	5,089,168	5,089,168
F. kWh Station Service	Atqasuk	3,177,587	3,177,587	3,177,587
	Anaktuvuk Pass	197,763	197,763	197,763
	Point Hope	54,474	54,474	54,474
	Nuiqsut	389,024	389,024	389,024
	Point Lay	45,617	45,617	45,617
	Wainwright	425,943	425,943	425,943
	Kaktovik	222,086	222,086	222,086
G. Efficiency (kWh Generated / Gallons Consumed) Standard: >= 12.50 Nuiqsut standard is >=10	Atqasuk	138,336	138,336	138,336
	Anaktuvuk Pass	12.75	12.75	12.75
	Point Hope	18.99	18.99	18.99
	Nuiqsut	10.26	10.26	10.26
	Point Lay	13.83	13.83	13.83
	Wainwright	13.57	13.57	13.57
	Kaktovik	16.36	16.36	16.36
H. Line Loss <=12% (kWh Gen.-(kWh Sold + Station Service)) /kWh Gen.	Atqasuk	12.91	12.91	12.91
	Anaktuvuk Pass	-0.53%	-0.53%	-0.53%
	Point Hope	12.00%	12.00%	12.00%
	Nuiqsut	12.00%	12.00%	12.00%
	Point Lay	5.21%	5.21%	5.21%
	Wainwright	7.98%	7.98%	7.98%
	Kaktovik	8.15%	8.15%	8.15%
H Fuel Cost Per kWh (Fuel \$ / kWh Sold)	Atqasuk	3.56%	3.56%	3.56%
	Anaktuvuk Pass	\$ 0.6963	\$ 0.7403	\$ 0.7403
	Point Hope	\$ 0.4509	\$ 0.5299	\$ 0.5299
	Nuiqsut	\$ 0.1099	\$ 0.2075	\$ 0.2075
	Point Lay	\$ 0.4212	\$ 0.5692	\$ 0.5692
	Wainwright	\$ 0.4586	\$ 0.6180	\$ 0.6180
	Kaktovik	\$ 0.2777	\$ 0.3613	\$ 0.3613
	Atqasuk	\$ 0.4998	\$ 1.2662	\$ 1.2662

North Slope Borough Power and Light
Calculation of Average Class Rates Per kWh
For the Test Period Ending June 30, 2015

Rate Schedule: Residential -Area Wide

(1) Block (by kWh)		(2) Rate (per kWh)	(3) Surcharge (per kWh)	(4) Total (\$/kWh) (2)+(3)	(5) Total (\$) (1)x(4)	(6) Avg. (\$/kWh) (5)/(1)	(7) Avg. rate (\$/kWh)- \$ 0.1958
0 to	600	0.1500		0.1500	112.500	0.1500	0.00
601 to	+	0.3500		0.3500	262.500	0.3500	\$ 0.1542
	to						
Max	750				375.0000	0.5000	0.1542

Rate Schedule: Community- Area Wide

(1) Block (by kWh)		(2) Rate (per kWh)	(3) Surcharge (per kWh)	(4) Total (\$/kWh) (2)+(3)	(5) Total (\$) (1)x(4)	(6) Avg. (\$/kWh) (5)/(1)	(7) Avg. rate (\$/kWh)- \$ 0.1958
0 to	1,000	0.2000		0.2000	200.00	0.2000	0.0042
1,001 to	10,000	0.3000		0.3000	3000.00	0.3000	0.1042
10,001 to	99,999	0.3500		0.3500	34999.65	0.3500	0.1542
** 10,001 to	99,999	0.0800		0.0800	7999.92	0.0800	0.0000

Rate Schedule: Residential-Nuiqsut

(1) Block (by kWh)		(2) Rate (per kWh)	(3) Surcharge (per kWh)	(4) Total (\$/kWh) (2)+(3)	(5) Total (\$) (1)x(4)	(6) Avg. (\$/kWh) (5)/(1)	(7) Avg. rate (\$/kWh)- \$ 0.1958
0 to	1,000	0.0800		0.0800	80.00	0.0800	0.0000
1,001 to	10,000						
10,001 to	99,999						

** Nuiqsut Community 10,001 and above .

Nuiqsut			
Invoice	Gallons	Price per gallon	Total
Total	339,202		\$ 1,666,482.64
1121067	(7,003)	Unleaded Fuel	\$ (33,661.32)
1121067-dm	(7,003)	Unleaded Fuel	\$ (626.77)
1121669	(15,875)	Unleaded Fuel	\$ (80,433.87)
1121669-dm	(15,875)	Unleaded Fuel	\$ (1,420.81)
1121809-dm	(15,075)	Unleaded Fuel	\$ (1,349.21)
1121809	(15,075)	Unleaded Fuel	\$ (76,380.52)
1122108	(16,062)	Unleaded Fuel	\$ (84,066.90)
1123128	(16,049)	Unleaded Fuel	\$ (95,571.80)
1123922	(16,076)	Unleaded Fuel	\$ (92,255.35)
1124551	(5,856)	Unleaded Fuel	\$ (35,794.81)
1121335		state fuel tax	\$ (320.00)
Total	209,253		\$ 1,164,601.28
Weighted average price of fuel			\$ 5.5655

Anatuvuk Pass

Total Gallons Reported	Total Amount Reported	Adjustments to remove:
478,938	3,095,536.50	Total reported
(4,698)	(41,923.07)	111122 - Unleaded
(4,865)	(28,584.21)	113225 - Unleaded
(4,865)	(37,377.39)	113795 - Unleaded
(4,865)	(40,100.25)	113796 - Unleaded
(4,830)	(38,652.56)	114330 - Unleaded
(4,700)	(26,254.55)	114595 - Unleaded
(4,800)	(33,914.88)	115480 - Unleaded
(4,800)	(38,090.88)	116596 - Unleaded
(4,804)	(37,498.10)	117438 - Unleaded
(4,800)	(44,817.55)	118135 - Unleaded
430,910	\$ 2,728,323.06	Adjusted total
	\$6.3315	Weighted average price of fuel

Summary of Eskimos Inc.

FY22 PIZ/PHO/BRW/AIN/KAK/ATQ

	Gallons	Cost	Tax adj.	delivery charge prorated	Total	price per gallon
Pt Lay	565,000	3.22805	0	0.1354	\$1,823,848.25	
				76,488	\$76,487.59	
	<u>565,000</u>				<u>\$1,900,335.84</u>	\$3.3634
Wainwright	1,130,397	3.30805	-0.08	79,872	\$3,728,850.04	
	<u>1,130,397</u>				<u>\$3,728,850.04</u>	\$3.2987
Pt Hope	881,751	3.30805	-0.08	79,872	\$2,926,208.32	
					\$0.00	
	<u>881,751</u>				<u>\$2,926,208.32</u>	\$3.3186
Kaktovik	544,900	3.30805	-0.08	79,872	\$1,838,836.45	
	<u>544,900</u>				<u>\$1,838,836.45</u>	\$3.3746
Barrow - Atq.	87,156	3.13355		0.0892	\$273,107.68	\$3.3075
	<u>757,954</u>	<u>3.22805</u>			<u>\$2,446,713.41</u>	
	<u>845,110</u>			<u>75,410</u>	<u>\$75,410.34</u>	
					<u>\$2,795,231.43</u>	
Barrow	491,300	2.5	Delivery fees		\$1,228,250.00	
ATQ.	<u>845,110</u>			0.00	<u>\$4,023,481.43</u>	\$4.7609

Signature: Keith Kurber II
Keith Kurber II (Apr 20, 2023 12:29 AKDT)

Email: keith.kurber@alaska.gov

Signature: Bob Doyle
Bob Doyle (Apr 20, 2023 12:30 AKDT)

Email: bob.doyle@alaska.gov

Signature: Bob Pickett
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